

IN THE CLAIMS:

Please amend the claims of this application so as to read as follows:

1. (Previously Presented) An optical disk including data segments, for recording data, provided in each sector in a recording track, wherein:

at least some of the data segments each include:

a pre-write region by which displacement

of the data upon recording is adjusted;

a clock mark field for recording a clock mark from which a

clock signal is obtained; and

a synchronization field for recording a synchronization

pattern with which displacement of the data is corrected.

2. (Original) The optical disk as set forth in claim 1, wherein

the at least some of the data segments including a synchronization field are provided at regular intervals in each sector.

3. (Original) The optical disk as set forth in claim 1, wherein

the synchronization field has a fixed position in each of the data segments.

4. (Original) The optical disk as set forth in claim 1, wherein

one of the data segments, located at a head of each sector, records a header pattern for matching the clock signal and the data in phase.

5. (Previously Presented) The optical disk as set forth in claim 1, wherein

the data segments each include a post-write field for offsetting displacement of the data that occurs when the data is recorded.

6. (Previously Presented) An optical disk with a recording track constituted by sectors arranged in a concentric or spiral form, in which data is rewritable sector by sector, wherein

each of the sectors is divided into segments,
each of the segments includes a data field for recording data and a clock field having a different light reflectance from that of the data field, and
the data field includes fields for recording a synchronization pattern with which displacement of the data is corrected.

7. (Original) The optical disk as defined in claim 6, wherein

each of the sectors includes at least one address segment
where address information is located and data segments for recording data,
the address segment is located at a head of the sector,
a first data segment immediately subsequent to the address
segment includes a field for recording a phase-introducing header pattern for use
in data reproduction, and
the fields for recording the synchronization pattern are
included at regular intervals in a second data segment immediately subsequent to
the first data segment and data segments subsequent to the second data segment.

8. (Original) An optical reproduction device for reproducing data

recorded in data segments provided in each sector in a recording track of an optical disk, said optical reproduction device comprising:
a clock generation circuit for generating a clock signal

from a clock mark recorded in a clock mark field provided in the data segments; and

a data rearrangement circuit for detecting a synchronization pattern recorded in a synchronization field provided in at least some of the data segments to correct displacement of the data according to the detected synchronization pattern.

9. (Original) The optical reproduction device as set forth in claim 8,
wherein
the data rearrangement circuit detects the synchronization pattern in each sector
of the optical disk at regular intervals.
10. (Original) The optical reproduction device as set forth in claim 8,
wherein
the data rearrangement circuit includes a window circuit for detecting the
synchronization pattern only in proximity to the synchronization field.
11. (Previously Presented) The optical reproduction device as set forth in
claim 8, further comprising:
a phase adjusting circuit for matching the data and the clock signal in phase using
a header pattern recorded in one of the data segments located at a head of each
sector of the optical disk.

12. (Previously Presented) An optical reproduction device for reproducing data from an optical disk with a recording track constituted by sectors arranged in a concentric or spiral form, in which data is rewritable sector by sector, wherein

each of the sectors is divided into segments, each of the segments includes data fields for recording data and a clock field having a different light reflectance from that of the data fields, and the data fields record synchronization patterns, said optical reproduction device comprising:

clock generation means for detecting a laser reflected at the clock field as a clock field signal and generating a clock for use in data reproduction according to the clock field signal;

synchronization pattern detection means for detecting the synchronization pattern recorded in the data fields;

reproduction means for reproducing sector by sector using the clock generated by the clock generation means and correcting displacement of data in the sector according to a result of the detection of the synchronization pattern.

13. (Original) The optical reproduction device as set forth in claim 12,
wherein

the synchronization pattern detection means includes window means for detecting the synchronization pattern only in a predetermined part in the data fields.

14. Canceled, without prejudice.

15. Canceled, without prejudice.

16. Canceled, without prejudice.

17. (Previously Presented) An optical recording device for recording data on an optical disk with a recording track constituted by sectors arranged in a concentric or spiral form, in which data is rewritable sector by sector, wherein

each of the sectors is divided into segments, and each of the segments includes a data field for recording data and a clock field having a different light reflectance from that of the data field,

the optical recording device comprising:

clock generation means for detecting a laser reflected at the clock field as a clock field signal and generating a clock for use in data recording according to the clock field signal; and

recording means for recording synchronization patterns for correcting displacement of data, together with recording data, in each data field using the clock at a predetermined cycle.

18. (Previously Presented) The optical reproduction apparatus as set forth in claim 8, wherein

the data rearrangement circuit rearranges the positions of the data by detecting the synchronization pattern, so that reproduced data is divided into 1-byte subsets of data at standard positions.

19. (Previously Presented) The optical reproduction apparatus as set forth in claim 12, wherein

the reproduction means corrects displacement of data by detecting the synchronization pattern, so that reproduced data is divided into 1-byte subsets of data at standard positions.